

### AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

#### LISTING OF CLAIMS

1. (Currently Amended) A next process-determining method, comprising:

digitizing a sample object into digital sample data;

compressing the digital sample data into compressed digital sample data having a predetermined data format;

calculating a difference ~~data-amount~~ value between a ~~data-amount~~ size of the compressed digital sample data and a ~~data-amount~~ size of reference data formed by digitizing and compressing a reference sample object in the same manner as the sample object is processed;

identifying which of a plurality of predetermined numerical ranges the difference ~~data-amount~~ value corresponds to; and

determining a predetermined process associated with the identified numerical range in advance as a next process to be carried out.

2. (Currently Amended) A next process-determining method according to claim 1, wherein the digital sample data is compressed into the compressed digital sample data having the predetermined data format by using a data-compressing method ~~capable of compressing an amount of data at a higher rate as digital data of an identical kind occurs more continuously, or as the digital data has a higher regularity~~ in which an

amount of compression depends on an amount of similarity within the digital sample data.

3. (Previously Presented) A next process-determining method according to claim 1, wherein the digital sample data comprises image data formed by a plurality of pixel data when imaging the sample object.

4. (Original) A next process-determining method according to claim 3, wherein the reference sample object is changed with a lapse of time.

5. (Currently Amended) A next process-determining method according to claim 3, ~~wherein the compressed digital sample data formed based on an image of the sample object picked up on an immediately preceding occasion is sequentially changed to reference data~~ the reference data comprises former digital sample data.

6. (Currently Amended) An inspecting method that picks up an image of an object to be inspected, digitizes the picked-up image to image data formed of pixel data, and determines a next process based on the image data to execute the next process, comprising:

compressing the image data into compressed image data according to a predetermined data format ~~in which an amount of data can be compressed at a higher rate as the pixel data of an identical kind occurs more continuously, or as the pixel data~~

~~has a higher regularity in which an amount of compression depends on an amount of similarity within the image data;~~

calculating a difference ~~data-amount~~ value between a ~~data-amount~~ size of the compressed image data and a ~~data-amount~~ size of reference data formed by digitizing and compressing a reference picked-up image in the same manner as the image of the object to be inspected is processed;

identifying which of a plurality of predetermined numerical ranges the difference ~~data-amount~~ value belongs to;

determining a predetermined process associated with the identified numerical range in advance as a next process to be carried out; and

carrying out the predetermined process.

7. (Currently Amended) An inspecting apparatus, comprising:

a data processor that ~~processes~~ compresses image data obtained by picking up an image of an object to be inspected and digitizing the picked-up image, according to a predetermined data format ~~in which an amount of data can be compressed at a higher rate as pixel data of an identical kind occurs more continuously in the image data or as the pixel data in the image data has a higher regularity in which an amount of compression depends on an amount of similarity within the image data;~~

a storer that stores a plurality of numerical ranges ~~which are~~ associated in advance with predetermined processes, and a ~~data-amount~~ size of reference data formed by digitizing and compressing a reference picked-up image in the same manner as the image of the object to be inspected is processed;

a calculator that calculates a difference ~~data-amount~~ value between a data ~~amount~~ size of the image data compressed by said data processor and the data-amount ~~size~~ of the reference data stored in said storer; and

a controller that identifies which of the plurality of numerical ranges stored in said storer the calculated difference ~~data-amount~~ value belongs to, and carries out a predetermined process associated with the identified numerical range as a next process to be carried out.

8. (Previously Presented) A next process-determining method according to claim 2, wherein the digital sample data comprises image data formed by a plurality of pixel data when imaging the sample object.

9. (Previously Presented) A next process-determining method according to claim 8, wherein the reference sample object is changed with a lapse of time.

10. (Currently Amended) A next process-determining method according to claim 9, wherein the ~~compressed sample data which is formed based on an image of the sample object picked up on an immediately preceding occasion is sequentially changed to reference data~~ reference data comprises former digital sample data.